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THE FUTURE OF THE ALASKA ECONOMY AND
THE ROLE OF THE PERMANENT FUND

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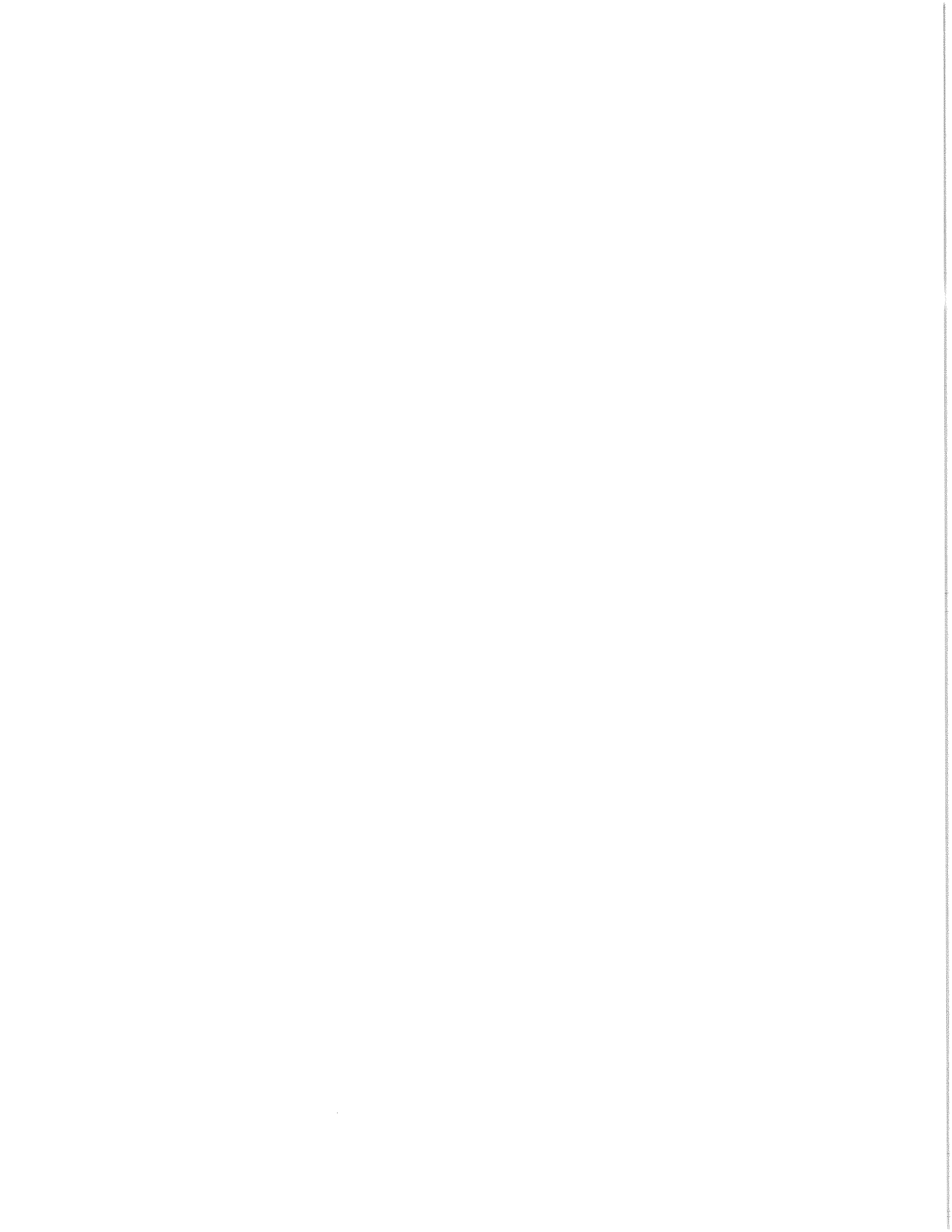
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Declining Oil Revenues, State Budgets,
and the Future of the Permanent Fund

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Four years from today, Prudhoe Bay production will begin its decline. A reduction in throughput of the Alyeska pipeline may be postponed for a number of years as smaller fields are discovered and developed, but inevitably production of oil from state-owned lands will enter a decade of continuous decline. As a direct result, beginning sometime during the next administration, state revenues from petroleum will begin a contraction lasting more than a decade-- a decade during which each year revenues from petroleum will be from \$100 to \$200 million less than the previous year. At the end of the period, the annual revenue gap, measured as the difference between actual revenues and what they would have been if Prudhoe Bay oil were inexhaustible, will be about \$2 billion. The employment gap, measured as the difference between actual and peak-year Alaskans employed in all industries, is a matter of speculation.

It is against this backdrop that I want to discuss economic strategies for the next decade and the role of the Permanent Fund. First, however, I want to address two other points: first, to try to put to rest the notion that we can invest ourselves out of the revenue gap and, second, to discuss some of the more obvious economic effects of the state revenue decline. I do this, not in the spirit of gloom and doom as some might suggest, but rather to inject some reality into discussions of our future--a future about which I actually feel very positive, particularly if we can face the challenges it will bring with our eyes and minds clear rather than fogged over with rhetoric.

To address the first point, let me just throw out some facts to disabuse you of the notion that massive basic sector diversification through wholesale infrastructure investment in the next decade will fill our revenue gap. This is not to say that Alaska doesn't need more infrastructure or that well-thought-out investments will not produce a payoff through jobs, local revenues, and increased income to Alaskans. The point is that under the most optimistic scenario, we cannot expect this to happen by 1990. If every industry now being nurtured through various state development programs blossoms beyond the expectations of its advocates, the value added thus created could not produce sufficient revenues to fill the gap left by the depletion of Prudhoe Bay oil.

For example, consider hard rock mining. Current press reports suggest the Red Dog Mine could produce \$25-30 million in state tax revenues annually. At that rate, at least four comparable mining developments would need to come on line annually for each of ten years to fill the Prudhoe Bay revenue gap. What about coal? The production of coal for export may soon be a reality. To match the value added currently provided by Prudhoe Bay oil, annual production must grow from its current level of about 1 million tons to between 1,500 and 2,000 million tons. Even if it were possible to produce in those quantities, there would be no market. The total projected import coal demand on the Pacific Rim in 1990 is only, at most, 125 million tons. What about agriculture? At current yields, the amount of land in agriculture would need to increase over

2,000 times to match Prudhoe Bay value added. This represents about 25 million acres--approximately the land area of the NANA Region.

These examples for coal and agriculture assume these industries can be taxed at the same high rates we apply to the petroleum industry. At more modest tax rates, production would need to be considerably greater to fill the gap. These examples point out an inescapable fact of scale. Prudhoe Bay produces gigantic taxable value added from a relatively small investment, which no other single industry or combination of industries can match. I have yet to see any analysis which shows step-by-step how basic industry diversification will fill the revenue gap. If the idea has merit, we need to see facts and figures rather than rhetoric. My question is "Where is the beef?" My analysis says there is very little.

Let's turn now to a discussion of the economic effects of a revenue decline, of the magnitude and duration suggested, occurring during the decade of the 1990s. We can consider first the public sector effects. After 30 years of growing public budgets, shrinking personal and business taxes, and expanding expectations, we will re-enter the real world of limits imposed by budget constraints. We observe in today's era of growing revenues that the division of the budget pie does not occur harmoniously. But in retrospect present deliberations will seem tame compared to those required to allocate the pieces of the pie when, each year, we know the pie will be smaller. Alaska has traditionally been a land without limits, and shifting gears to think in such terms will not be easy.

The gradual, continuous, predictable nature of the revenue decline will exacerbate the problem of adjustment. Rather than a swift break with the past--a catharsis, like an earthquake which draws people together in a common cause--it will be like a ten-year toothache--a chronic problem that cannot be ignored. This will have very different implications for Alaskan society than the chronic "problem" of this decade--wealth management.

The gradualness of the decline will obscure its underlying cause. Some will continue to argue that the decline is temporary and that the process of spending to diversify must accelerate. Tremendous pressure will exist to continue to feed the public sector juggernaut through borrowing beyond the means of the state. Some will call for increased taxation of the petroleum industry. This industry which has provided the skills to transform the state's good luck into billions of revenues will be asked to ante up more billions. When the taxing limit of the oil industry is reached, there will be little thanks for its contribution to the state, and some will even find it possible to pass the blame for the revenue decline on to them. Other innocent groups will also find themselves the object of analyses of what went wrong, misguided efforts which will further complicate the transition to post-Prudhoe public spending.

The actual budget cutbacks will have a modest effect on the operation of government at first because some of the budget fat

will, with any luck, be the first to go. Before long, however, the cuts will reach meat and bone, resulting in both reductions in the quantity and quality of public goods and services provided and increases in personal and business taxes. The irony is that while we will be feeling sorry for ourselves, we will continue to be the envy of others. This is because our expectation of the things government should be providing without cost as entitlements, such as subsidized loans and monetary payments for just being in Alaska, has grown so large so fast. Consequently, any downward adjustment toward a level consistent with what other states are able to provide on more limited budgets will seem unfair, and we will feel poor even while being relatively rich.

These concerns would not be so important to the average Alaskan were it not for the fact that Prudhoe Bay petroleum revenues directly and indirectly support such a large portion of jobs in the state and provide such a large portion of the value added of the state's economy. Most of those revenues contribute to the personal income of Alaskans and, through what economists call the multiplier effect, support the jobs and provide the income of other Alaskans. For these Alaskans, the question is how the chronic deterioration of this source of stimulation to the economy will affect their jobs and income. Will it be a reversal of what has happened in the last three years, during which we have experienced the largest economic boom since statehood--fueled primarily by Prudhoe oil revenues?

The contrasting experiences of Anchorage and Fairbanks after completion of construction of the Alyeska pipeline are instructive in sorting out the likely effects. Both economies boomed during construction; but subsequently the economy of Fairbanks contracted sharply while that of Anchorage merely flattened out. The economic adjustment associated with declining Prudhoe Bay oil revenues will probably fall somewhere between the experiences of these two communities. We cannot say precisely where, but we can begin to discuss those factors which will contribute to a contraction and those which will contribute to a flat economy.

I have already mentioned the most important factor contributing to a bust--the withdrawal of several hundred million dollars in personal income from the economy annually over each of a number of years. This is essentially what happened in Fairbanks. No matter what types of programs are cut back to reduce the income delivered to the private sector--through less government construction, reduced subsidies, less government employment and operations, fewer transfers to individuals and local governments--the qualitative effect will be the same--fewer jobs, fewer new businesses, reduction in property value, a prolonged slump in highly cyclical industries (primarily construction), lower total income, lower per capita income, and slowdown in population growth. There will be out-migration of the more mobile and employable elements of the population, leaving a smaller workforce behind to support a larger population of dependents. The vitality present in a growing economy will evaporate.

We all know there are certain nonquantifiable factors which have contributed to Alaska's economic growth in the past such as the perception of Alaska as a great land of opportunity. A protracted decline in the Alaska business cycle could cast a long shadow over that perception and exacerbate the contraction.

There are three factors, however, which will moderate and tend to counterbalance the negative multiplier-accelerator syndrome which I have just mentioned--factors which we have seen operating in Anchorage in the post-pipeline period. First, we can look to growth in the basic sectors of the economy to pick up some of the slack. The most important of these is the petroleum industry itself which will be looking for and producing oil from new fields and using more employees and equipment to squeeze more and more oil from existing fields at the same time that state revenues are falling. The input required per barrel of output--in terms of jobs, material, etc.--can only increase as more marginal fields are developed. (Obviously, more inputs per barrel mean less profits per barrel and thus less income taxable by the state.) Growth of traditional industries like fisheries, mining, tourism, agriculture, and federal government will be of secondary importance.

Second, there are some less obvious sources of economic strength such as the continuing accumulation of individual wealth and the increasing attractiveness of Alaska as a place to live independent of economic opportunities. For example, the over-65 population has

experienced dramatic growth in recent years. This population provides a source of income (pensions) to the economy independent of the business cycle and is a heavy demander of certain types of high-value service industries.

The third factor is the development of an economic "cushion" in our support industries. A portion of the current boom is attributable to a deepening and broadening of the support and infrastructure sectors of the economy rather than to the multiplier. This deepening and broadening consists of those new types of businesses that are opening because a critical market size has been reached which now makes them viable. When personal income contracts, these businesses will not all strike their tents in the night and go south if for no other reason than the requirement of paying the fixed costs to which they are committed. Once established in the state, they will hang on--at least through a few lean years. This trend in Alaska is, of course, a reflection of a national economic trend toward a growth in service-type jobs which are market oriented. This cushion will not prevent a decline but helps to explain why each trough of the Alaska business cycle is generally not as deep as its predecessor.

Whatever the relative strength of these two sets of forces, there will be a massive adjustment of the economy as the public sector shrinks in size relative to the private sector. All the social costs attendant such a restructuring will be present.

Whether one chooses to call this a bust, a crash, a restructuring, or a soft landing will largely depend upon one's perspective and expectations. A slowdown in the rate of economic growth is inevitable, and to those accustomed to the consistently higher-than-average growth rates that Alaska has enjoyed in the past, a mere deceleration will be a "bust." To others, a "bust" conjures up visions of a contraction of the economy and population back to the levels of 1968, on the eve of the discovery of oil at Prudhoe Bay. This will clearly not occur¹.

This scenario of inevitable public sector decline and private sector readjustment is not a reason for gloom or despair. We still have time to prepare--both psychologically and fiscally. The psychological preparation involves the recognition that the revenue loss from Prudhoe Bay depletion is an inevitability which no combination of policies can prevent. Consequently, to hold out the belief that such a set of policies exists is counterproductive now and in the future. Acceptance of this fact will allow us to set to work preparing for the challenges of the next decade instead of dissipating energy looking for quick fixes now and voicing recriminations when the readjustments begin.

¹We should distinguish the readjustment which will occur as Prudhoe revenues decline from the deceleration of growth which the state is now experiencing as the boom from the accelerated growth of government spending over the last three years exhausts itself. This deceleration is a precursor of the latter readjustment.

Fiscal preparation means prudent management of our current wealth. Combining the Permanent Fund, oil in the ground, and other financial assets, the amount of state wealth requiring management is roughly \$32 billion--an amount many countries of the world, let alone states of the Union, would find sufficient. In spite of current saving, this wealth is being dissipated at a rate in excess of \$1 billion annually. A conservative trustee of such a portfolio, instructed to hold and manage it for the present and future generations in an equitable manner, would maintain principal and spend only real earnings. This would produce a stable level of income in perpetuity for support of public programs.

To this constant stream of income from state assets would be added all recurring revenues to produce a total which could support an ever increasing level of expenditures which I call "sustainable spending."² If the current spending limit were modified to reflect the amount of appropriations continuously sustainable from Prudhoe Bay oil, then the 1985 general fund budget would be \$2 billion--a floor below which appropriations never need fall in the future in real dollars. In contrast, the current spending limit cannot guarantee that appropriations will not fall in the future, and in fact its high level guarantees that appropriations will fall in the future.

²See "Sustainable Spending Levels from Alaska State Revenues," Alaska Review of Social and Economic Conditions, February 1983, Vol. XX, No. 1; and A Sustainable Spending Expenditure Limit, for Senate Advisory Council, 1984.

The difference between the sustainable level and likely appropriations of \$3.5 billion is a measure of the amount of wealth we will consume this year. Its capitalized value is the loss in sustainable spending in future years. For example, a continuation of current spending levels for five years drops the sustainable spending level from \$2 billion to \$1.7 billion.

People say the idea of reducing the current budget is naive or that it does not consider the special demands attendant the building of our new state. In reply to the first criticism, I merely point out that this sustainable level budget of \$4,000 per capita is almost four times the national average and twice that of the next highest states of Wyoming and Hawaii. To the second, I suggest there is nothing unique about Alaska's present needs since each age produces its own demands on public resources for capital expenditures. New York City has been building infrastructure for 300 years and doesn't seem to have run out of demands for further expenditures. I expect Alaska to be much the same in future years.

Any of a number of methods of saving current revenues would contribute to the accomplishment of the primary objective of sustainable spending. The primary advantage of the sustainable spending calculation is that it sets quantifiable targets for saving and spending in each year and shows exactly the wealth transfer to the next generation of Alaskans involved in each saving-spending choice.

As a practical matter, there is only one institution which can carry out the wealth management function. The truly unique feature about Alaska is the control the present generation of Alaskans has over the wealth of future generations. This is a situation unknown in other states, and consequently no institutions exist elsewhere to mediate between the demands of the current and future generations. The legislative and executive branches of government provide a time-tested set of checks and balances upon one another in the allocation of the budget among competing current demands, but unfortunately these institutions have not served well as a forum for the next generation to share in the decisions of how much and in what form to divide the wealth among generations. The Permanent Fund provides that check and forum by its constitutional mandate and by its independence from the annual budgetary cycle.

For these reasons, the Permanent Fund is really the fourth branch of government in Alaska. It is a unique institution for a unique situation. In many respects, it functions like the Federal Reserve at the national level, which is the check on the budgetary behavior of the Congress and the President. The Fed's role is to set a course toward a long-range economic goal for the economy and then stick to it in spite of short-term economic and political fluctuations. We may not appreciate its policies in the short run; but like a medicine with an unpleasant taste, we accept it, knowing in the long run we are likely to be better off having taken it. The Permanent Fund should be setting and steering such a course.

The Federal Reserve has two additional important functions which I believe the Permanent Fund should adopt--the gathering of information and the setting of investment standards. In order successfully to become the focal point for charting a long-term course for the economy, the Fund needs objective information--information not only about its own investments but also on all aspects of the economy of Alaska. Just as all of the pressures in the regular branches of government focus issues on short-term objectives, so the economic and social information collected and used in policy deliberations in those arenas is mostly of a short-term nature. But charting a course for the economy requires much more than trying to determine what is around the next bend in the road. It requires a complete roadmap showing the opportunities and dangers associated with each route. In addition, it requires continuous revision of the roadmap as we learn more about the geography through which we are passing.

The second function is that of providing a standard of performance in investment analysis for other state agencies to follow. Without many of the pressures constraining other state analysts, the Fund can develop standards by which state investments can be evaluated and compared. The first step has already taken place in that direction through the excellent earnings record of Fund investments. This earnings record is a yardstick against which any alternative investment of state funds for any objective should be measured.

Let me close by stretching the roadmap metaphor about how we control our future: We drive down the highway of time with control over the steering wheel and accelerator. Unfortunately, we face the rear, our eyes continuously on the territory we have just traversed. It is from this limited perspective that we construct our roadmaps and determine direction and speed for our vehicle. Analysts attempt to draw the roadmap of the future from the territory just passed by, but our predictions are necessarily inaccurate. On such an uncertain ride, a little insurance of the kind the Permanent Fund can provide is a welcome opportunity which should not be overlooked. By its own method of diversification, it can minimize future risks and make our journey much more stable and enjoyable.

